

Following is a short summary of current water and wastewater project descriptions. Full descriptions of water and wastewater projects, as well as all of the other current Capital Improvement Program (CIP) projects, are available in the <u>CIP Budget for Fiscal Years 2017-18</u> through 2022-23.

## **Water Projects**

All water projects are non-mandated but are being replaced due to useful life and condition of the facility.

**San Antonio Water** – the water pipeline is being replaced at the same time as the San Antonio Avenue Sewer Replacement Project to avoid disruption to neighborhood and having to dig up the newly paved road in the future. The existing roadway is scheduled to be paved as part of the Grant the City received. Approximately 1,500 feet of new 8" water pipeline will be installed as part of the project.

**San Mateo Avenue Water** – The water pipelines also being replaced at the same time as sewer project to avoid impacts to businesses in the future if the replacement is done at a later time. The project will install approximately 2,200 feet of new 8" water pipeline along San Mateo Avenue from Angus and El Camino Real.

**Avenues 1-1 Water** – Not a mandated project but is identified as one of the capital improvements project in the 10 year work plan. This project will replace aging water pipelines within the streets bounded by San Mateo Avenue, Huntington Avenue and Sylvan Avenue. The project is being done concurrently with the Avenues 1-1 Sewer Replacement Project. The project will install approximately 3,800 feet of new 8" water pipelines on Huntington Avenue, West Angus Avenue, Maryland Place and Sylvan Avenue.

**Tank 1** – The tank is being replaced due to age and condition of the tank. In addition, the tank doesn't meet current seismic codes and the City is unable to use the full capacity of the tank. The steel tank is also located behind the houses along Cunningham Way which is a concern for the City if the tank fails. The new concrete tank will be designed to meet the new current seismic codes and once completed, the entire tank capacity of 2.5 million gallons can be used for potable water and emergency fire supply use.

**Commercial Water Meter Replacement Project** – this project is a continuation of the residential meter replacement project that was brought to Council for project acceptance earlier this year. This project will convert the existing commercial meters to advanced water meter system.

## **Wastewater Projects**

**First Avenue Sewer Replacement Project** – Project consists of replacing the aging sanitary sewer pipeline along First Avenue adjacent to the Grade Separation Project. The project will replace approximately 1,600 feet of 8" sewer main along First Avenue.

**Crestwood Drive Sewer Main** – This is one of the mandated project from SF Baykeeper as part of the Consent Decree. The project will replace approximately 2,000 feet of sewer pipeline from 8" to 12" to provide additional capacity to prevent future SSO. The project limits are from Valleywood and Crestwood Drive to Crestwood Pump Station.

San Antonio Avenue Sewer Main Improvement – Another mandated project from SF Baykeeper as part of the Consent Decree. This project will replace approximately 1,500 feet of existing sewer pipeline upsizing from 6" to 8" and 8" to 12" in diameter to provide additional capacity to prevent future SSO. The project limits are from the intersection of San Antonio and Santa Inez Avenue to Santa Helena and San Antonio.

**San Mateo Avenue Sewer Main Improvement** - Another mandated project from SF Baykeeper as part of the Consent Decree. This project will replace approximately 1,800 feet of existing sewer pipeline upsizing from 6" to 24" inches. The reason for the large diameter is to convey upstream sewer flows from the Crystal Spring Road sewer and also to provide additional capacity for future development and redevelopment projects in the Downtown corridor. The limits of replacement is from El Camino Real to Angus along San Mateo Avenue.

**Crystal Springs Road Sewer Main Improvement** - Another mandated project from SF Baykeeper as part of the Consent Decree. This project will replace approximately 3,400 feet of existing sewer pipeline upsizing from 8" to 12", 16" and 24" pipelines to provide additional capacity. The project limits are from City Park Way, then along Crystal Springs Road and crosses El Camino Real to connect to the San Mateo Avenue sewer.

**Avenues 1-1 Sewer Replacement Project** – not a mandated project but is identified as one of the capital improvements project in the 10 year work plan. This project will replace aging sewer pipelines within the streets bounded by San Mateo Avenue, Huntington Avenue and Sylvan Avenue. This project is being designed concurrently with **Avenues 1-2 Sewer Replacement Project** – which is bounded by Sylvan Avenue, Huntington Avenue, San Mateo Avenue, Florida Avenue and Taylor Avenue. Both projects will replace approximately 6,700 feet of sewer pipelines. The water pipelines are concurrently being replaced as the area experienced a lot of water main breaks. Approximately 7,830 feet of water pipelines are being replaced.

Crestwood Pump Station Replacement - Another mandated project from SF Baykeeper as part of the Consent Decree. Crestwood Pump Station is one of the largest pump station in the City's wastewater collection system and is located along Crestwood Drive. This project will replace the pump station with new pumps since the existing pumps are undersized to meet future peak wet weather flow. The pump station will include a new wet well design with submersible pumps that matches the City's design at other recent pump station projects. The existing force main is currently located behind the backyard properties along Crestwood Drive which creates accessibility issues during repair. The force main material is asbestos cement pipe and has broken several times resulting in sanitary sewer overflows. The new force main will be installed along the roadway using a jointless and non-metallic pipeline material, high

density polyethylene (HDPE) that is resistant to joint deflection from ground movements and corrosion.

Crestmoor and Lomita Pump Station Replacement – Both are mandated projects from SF Baykeeper as part of the Consent Decree. The projects are being designed together as a single project to reduce the overall design cost. The existing pump station equipment is antiquated and in poor condition. As part of the project, the facilities will be upgraded with new pumps and generator. The pump station will include a new wet well design with submersible pumps that matches the City's design at other recent pump station projects. Crestmoor Pump Station is located along Crestmoor Drive near Darby Place. Lomita Pump Station is located at the intersection of San Antonio and Santa Helena.

Water Quality Control Plant – cost for various different projects to improve the treatment plant. San Bruno's share of the plant's cost is about 27%. One of the largest project is the improvement to the digester which is approximately \$50,000,000. Other projects includes: Plant Wide Painting Program, Vactor-Sweeper Waste Receiving Station Improvement, Sodium Hypochlorite Storage Tank Replacement, Maintenance Building Roof Replacement, Secondary Clarifier 1 and 2 Rehabilitation, Effluent Storage Basin Liner Replacement, Switchgear and Cogne Controls Upgrade, and SLR Update Planning.